NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

SOIL SALINITY MANAGEMENT - NONIRRIGATED
(acre)
CODE 571

DEFINITION

Management of land, water, and plants to control harmful accumulations of salts on the soil surface or in the root zone on nonirrigated areas.

PURPOSE

This practice will be applied to treat, remedy or control the formation of saline or sodic-affected areas on nonirrigated land to permit desired plant growth and protect surface and ground water resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all nonirrigated land where (a) human-induced soil salinity or sodicity is at or approaching a level that adversely affects land use, or (b) combinations of factors - topography, soils, geology, precipitation, and land use - indicate the future probability of such adverse effects. It does not apply to saline or sodic conditions related to or induced by irrigation.

CRITERIA

General Criteria Applicable To All Purposes

Conduct on-site transects using the EM-38 or other approved devices. Visual observations of crop response in conjunction with the transects will be used to arrive at perponderence of salinity. Refer to National Engineering Handbook, Section 16, Chapter 4, for guidance on how electrical conductivity levels affect potential yields.

Map the affected area.

Correct the salinity problem by applying the practice(s) as part of an overall resource management system (RMS).

Planned actions should give first consideration to prevention rather than correction.

To the maximum extent practical, use vegetation to utilize soil water in the recharge or affected areas.

When subsurface drains are needed, the configuration selected will give priority consideration to placing interceptor drains close to the recharge area to maximize the benefited area and provide a drain effluent of the best possible water quality.

Where applicable, improve surface drainage in the recharge or affected area.

Corrective measures must comply with water quality laws and regulation. Monitoring of before and after conditions may be recommended.

PLANS AND SPECIFICATIONS

To maintain healthy vegetation, use plant species that are adapted to saline areas. List plants and provide management details on the plants adapted for use in recharge and affected areas. Consider factors such as water usage, salt tolerance and erosion control characteristics. Incorporate, by reference, appropriate conservation practices that constitute components of the treatment of recharge and affected areas.

List the types and extent of environmental and ecological monitoring and evaluation that may be necessary.

NRCS-Minnesota
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Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

OPERATION AND MAINTENANCE

Protect newly seeded areas from domestic livestock grazing, fire and traffic until well established. Periodic mowing may be needed the establishment year to control competition from weeds. After the establishment period, use spot mowing or spot herbicide treatment to control noxious weeds and other undesirable plant growth.

Any mowing after the establishment year should be done after August 1 to protect nesting wildlife.

Inspection, reseeding, fertilization and pest control may be needed to insure this practice functions as intended throughout its' expected life.